

Data will be compiled, analyzed, and utilized in the construction of a diurnal time budget and an energetics simulation model.

SALT RIVER PROJECT'S AVIAN PROTECTION PROGRAM

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Salt River Project (SRP), an electric and water utility, has had an Avian Protection Program in continual development since the 1980s. The Avian Protection Program is aimed at protecting birds from harmful contact with electrical distribution facilities. Although the program strives to protect all migratory birds, an emphasis is placed on raptors because of their larger wingspan. The most common raptor species to interact with power facilities in the Phoenix, Arizona, area include the Harris' hawk (*Parabuteo unicinctus*), red-tailed hawk (*Buteo jamaicensis*), and great horned owl (*Bubo virginianus*). SRP protects birds from the electric system in a number of ways. For all new construction, bird protection measures include insulating "jumper" wires, capping transformer bushings and coating transformers with nonconductive paint. Other system revisions include installation of perches and visual deterrents, or changes in equipment configuration. The program also includes partnerships with Arizona Game and Fish Department and Liberty Wildlife Rehabilitation Foundation. Compliance with the Migratory Bird Treaty Act is ensured through permits obtained from U.S. Fish and Wildlife Service. SRP has been tracking bird mortalities and collecting data including species and location for several years. This information is now being interfaced with a GIS system of the distribution system. The graphic interface enables SRP to identify problem areas and prioritize where upgrades of older systems are needed. This proactive approach allows SRP to complete system corrections before additional electrocutions can occur.

DISPERSAL AND HABITAT SELECTION OF RELEASED APLOMADO FALCONS

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Aplomado falcons (*Falco femoralis*) were last recorded in the United States in the 1950s. A priority of the recovery plan is to reintroduce this endangered species in suitable habitats in the United States. As a result of a joint venture between The Peregrine Fund and the U.S. Fish and Wildlife Service, 26 young-of-the-year aplomado falcons were released into the wild in 1993 and 12 during 1994. These falcons were released at Laguna Atascosa National Wildlife Refuge, an 18 000-ha coastal refuge approximately 32 km north of Brownsville, Texas. The young fledgling

falcons were recaptured after about 3 wk and tail-mounted radiotransmitters were attached. Ten aplomado falcons with operational transmitters were monitored for 6 mo in 1993. Only four mortalities were confirmed. Thus far, in late 1994, six aplomados are currently being monitored. Monitoring of released falcons is conducted for at least 6 mo or until the transmitter fails. In 1993 dispersal distances ranged from 2–16 km. Average daily movements between roost and forage sites averaged about 5 km. Preferred habitats appear to be coastal grasslands adjacent to marshy areas or saltflats containing scattered mesquite (*Prosopis glandulosa*) and yucca (*Yucca treculeana*). Dominant vegetation at forage sites is typically less than 60 cm tall with patches of bare ground.

FACTORS LIMITING A POPULATION OF TAWNY OWLS IN A CONIFEROUS FOREST IN NORTHERN BRITAIN

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The number of occupied tawny owl (*Strix aluco*) territories increased during 1981–91, while reproduction and turnover in the owl population varied greatly in response to a 3-yr cycle of field vole (*Microtus agrestis*) abundance. The increasing number of occupied owl territories resulted ultimately from an improvement in the carrying capacity of the forest for tawny owls, although the increase in owls lagged behind the habitat improvements. To facilitate this increase, the resident territorial owl population received more recruits than was necessary to replace losses, and recruitment was the proximate factor most closely associated with year-to-year changes in the number of occupied territories. Recruitment was also influenced by the stage of the vole cycle. In years when vole numbers were increasing, virtually all birds in the nonterritorial sector were recruited. In years when vole numbers were declining or low, only some of the nonterritorial owls were recruited and most deferred recruitment until vole numbers increased.

WINTERING ECOLOGY OF PRAIRIE FALCONS IN THE SNAKE RIVER BIRDS OF PREY NATIONAL CONSERVATION AREA

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We determined differences in winter home ranges and observed hunting attempts of nine male and six female prairie falcons (*Falco mexicanus*) trapped in the Snake River Birds of Prey National Conservation Area (SRBOPNCA) in Idaho, between November and March, 1993. Winter home ranges of females were not larger than males. Successful capture attempts suggest prairie falcons prey mainly on horned larks (*Eremophila alpestris*) (seven